IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:   10/598,627   Confirmation No.: 8155
Appellant(s):   Matti Puputti
Filed: 06/13/2007
Art Unit: 2423
Examiner: Rong Le
Title: CONDITIONAL ACCESS SYSTEM

Customer No.:   00826

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 CFR § 41.37

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences," filed October 7, 2010.

1.   ***Real Party in Interest.***

The real party in interest in this appeal is Nokia Corporation, the assignee of the above-referenced patent application.

2.   ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3.   ***Status of Claims.***

All of the pending claims under consideration, namely Claims 16-31 and 36-46, stand rejected and are the subject of the present appeal. Claims 1-13, 32 and 33 are pending but withdrawn. The remaining claims, namely Claims 14, 15, 34 and 35, have been cancelled.

4.   *Status of Amendments.*

There are no unentered amendments in this application.

5.   *Summary of Claimed Subject Matter.*

The claimed invention will now be summarized with references to passages of the specification and drawings. It should be understood, however, that the references are provided solely for explanatory purposes, and should not otherwise in and of themselves be taken to limit the scope of the claimed invention.

Independent Claim 16 recites an apparatus including a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform a number of operations. *See, e.g.*, Pat. Appl., FIGS. 3 and 4; p. 9, ll. 14-21. As recited, the operations include receiving a plurality of control messages relating to broadcast content and comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content. *See, e.g., id.* at FIGS. 5 and 6; p. 6, l. 17 – p. 7, l. 2; p. 10, l. 24 – p. 11, l. 10; and p. 11, ll. 12-14. Each of the control messages is associated with time information relating to a transmission time for control messages which are to be transmitted to a receiver in the future. *See, e.g., id.* And as also recited, the operations include selectively activating the receiver to receive the future control messages at the transmission time. *See, e.g., id.* at p. 12, ll. 1-19.

Depending from Claim 16, Claim 36 recites that each of the control messages is further associated with information defining transmission parameters for the control messages to be transmitted in the future. *See, e.g., id.* at p. 10, l. 33 – p. 11, l. 2. As recited, the transmission parameters include information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future. *See, e.g., id.*

Independent Claim 24 recites a method including receiving a plurality of control messages comprising information for determining whether a user has necessary subscriptions in place to view a broadcast or information required to decrypt the broadcast. *See, e.g.*, Pat. Appl., FIGS. 5 and 6; p. 6, l. 17 – p. 7, l. 2; p. 10, l. 24 – p. 11, l. 10; and p. 11, ll. 12-14. The control messages also include transmission time information relating to a transmission time of future

control messages. *See, e.g., id.* And as also recited, the method includes selectively activating a receiver to receive the future control messages at the transmission time. *See, e.g., id.* at p. 12, ll. 1-19.

Dependent from Claim 24, Claim 37 recites that the plurality of control messages further include information defining transmission parameters for the control messages to be transmitted in the future. *See, e.g., id.* at p. 10, l. 33 – p. 11, l. 2. The transmission parameters include information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future. *See, e.g., id.*

Independent Claim 26 recites an apparatus including a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform a number of operations. *See, e.g.,* Pat. Appl., FIG. 3; and p. 8, ll. 22-27. As recited, the operations include preparing a plurality of control messages comprising information for determining whether a user has necessary subscriptions in place to view a broadcast or information required to decrypt the broadcast. *See, e.g., id.* at FIGS. 5 and 6; p. 6, l. 17 – p. 7, l. 2; p. 10, l. 24 – p. 11, l. 10; and p. 11, ll. 12-14. Each of the messages includes information relating to a predetermined transmission time for future control messages. *See, e.g., id.* And as also recited, the operations include directing transmission of the control messages to a receiver for receiving the control messages, where the control messages are transmitted to the receiver for a selective activation module to selectively activate the receiver to receive the future control message at the predetermined time. *See, e.g., id.* at p. 12, ll. 1-19.

Depending from Claim 26, Claim 43 recites that each of the control messages further includes information defining transmission parameters for the control messages to be transmitted in the future. *Id.* at p. 10, l. 33 – p. 11, l. 2. The transmission parameters include information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future. *Id.*

Independent Claim 27 recites an apparatus including a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform a number of operations. *See, e.g.,* Pat. Appl., FIGS. 3 and 4; p. 9, ll. 14-21. As recited, the operations include causing transmission time information to be requested for

conditional access messages to be transmitted in the future, and receiving the transmission time information. *See, e.g., id.* at FIGS. 5 and 6; p. 6, l. 17 – p. 7, l. 2; p. 10, l. 24 – p. 11, l. 10; and p. 11, ll. 12-14. The operations also include selectively turning on a receiver to receive the messages at a time that substantially coincides with the future conditional access message transmission time. *See, e.g., id.* at p. 12, ll. 1-19.

Independent Claim 31 recites a method including causing transmission time information to be requested for conditional access messages to be transmitted in the future, and receiving the transmission time information. *See, e.g., id.* at FIGS. 5 and 6; p. 6, l. 17 – p. 7, l. 2; p. 10, l. 24 – p. 11, l. 10; and p. 11, ll. 12-14. The method also includes selectively turning on a receiver to receive the messages at a time that substantially coincides with the future conditional access message transmission time. *See, e.g., id.* at p. 12, ll. 1-19.

6.   *Grounds of Rejection to be Reviewed on Appeal.*

Pending Claims 16, 17, 24-28, 31, 36-38, 43 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,452,644 to Shimakawa et al., in view of PCT Patent Application Publication No. WO 03/065650 to Bons (corresponding U.S. Patent No. 7,614,079 being cited as an English translation). Pending Claims 18-20 and 39-41 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of European Patent Application Publication No. EP 0975109 to Suzuki. Pending Claims 21 and 22 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of U.S. Patent No. 7,698,568 to Alve et al. Pending Claims 23 and 42 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of U.S. Patent No. 7,167,895 to Connelly. And pending Claims 29, 30, 45 and 46 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of U.S. Patent Application Publication No. 2002/0021809 to Salo et al. Again, Claims 1-13, 32 and 33 are pending but withdrawn; and the remaining claims, namely Claims 14, 15, 34 and 35, have been cancelled.

7.   ***Argument.***

As explained below, Appellant respectfully submits that the claimed invention is patentably distinct from Shimakawa, Bons, Suzuki, Alve, Connelly and Salo, taken individually or in any proper combination. In view of the remarks presented herein, Appellant respectfully requests reconsideration and reversal of the rejections of all of the pending claims.

A.   *Claims 16, 17, 24-28, 31, 36-38, 43 and 44 are Patentable*

As indicated above, pending Claims 16, 17, 24-28, 31, 36-38, 43 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimakawa, in view of Bons.

Briefly, Shimakawa discloses receiving EPG messages with time information indicating when the next EPG message will be transmitted. In contrast to independent Claim 16, however, Shimakawa does not disclose "receiving a plurality of control messages relating to broadcast content and comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast, each of said control messages being associated with time information relating to a transmission time for control messages which are to be transmitted in the future."

Bons discloses EMM messages. Bons further discloses that the EMM messages are transmitted with a field containing "listen-time" information that represents a minimum duration sufficient to enable the terminal to retrieve the transmitted messages. The minimum is "estimated as a function of the repetition rate at which EMM messages are sent" (paragraph 45). The Examiner considers the "listen-time" to correspond to the transmission time information of the claims.

First, under no reasonable interpretation may the "listen-time" of Bons be considered transmission time information similar to that of the claimed invention. It appears that, from paragraph 27 of Bons, a number of copies of a particular EMM can be sent on a channel before they are eliminated from the broadcast. The "listen-time" is the minimum duration of time the receiver has to stay on a particular channel to ensure that it receives at least one copy of a desired *current* EMM. Under no reasonable interpretation may this "listen-time" information be considered "time information relating to a predetermined transmission time for future control

messages" or "time information for conditional access messages to be transmitted in the future" as recited by the claimed invention. Moreover, since the "listen-time" designates a time period and not a specific time, the apparatus could not "selectively [activate] the receiver to receive the future control messages at the transmission time," as recited by the claims, if the "listen-time" were considered the transmission time. A receiver informed of the "listen-time" would only know how long to stay on a particular channel. It would not know *at what time* to activate a receiver to receive the future message. The decision to start filtering a message from a channel at a particular time in Bons would not be based on the "listen-time."

Second, as previously explained with respect to Claim 27 in response to the second Official Action of January 6, 2010, even if one could argue (albeit incorrectly) that Shimakawa and Bons disclose respective elements of the claimed invention, Appellant respectfully submits that there is no apparent reason for their combination. EPG messages are very different to EMM messages. EPG messages include information to be viewed by a subscriber, whereas EMM messages include information that is never seen by a subscriber but that is used by the system to work out whether the necessary subscriptions are in place to access a broadcast. Shimakawa discloses that the time information can also specify when other types of data, such as weather forecasts, news or stock prices, will be sent. However, the other types of data are also all meant to be viewed by the subscriber, and are all very different to EMM messages. As such, the skilled person would not look to Bons to modify the communication of the EPGs and the other types of data in Shimakawa.

Appellant therefore respectfully submits that independent Claim 16, and by dependency Claims 17-23, is patentably distinct from Shimakawa and Bons, taken individually or in any proper combination. Appellant also respectfully submits that independent Claims 24, 26, 27 and 31 recite subject matter similar to that of independent Claim 16. As such, Appellant respectfully submits that independent Claims 24, 26, 27 and 31, and by dependency Claims 25, 28-30 and 36-46, are also patentably distinct from Shimakawa and Bons, taken individually or in any proper combination, for at least the reasons given above with respect to independent Claim 16.

1.   Claims 27-31 and 44-46

In further contrast to the claimed invention, neither Shimakawa nor Bons, taken individually or in any proper combination, teaches or suggests causing "transmission time information to be requested" for conditional access messages to be transmitted in the future and not "requesting for conditional access messages," as recited by independent Claims 27 and 31, and by dependency Claims 28-31, 45 and 46. It may be argued that Bons discloses requesting EMM messages. However, there is no disclosure in Bons of *transmission time information* being requested for conditional access messages to be transmitted in the future. Moreover, at least for the reason that the EMMs requested in Bons are not disclosed to include any transmission time information for messages to be transmitted in the future, which would allow a receiver to be activated at the right time, the request for EMMs cannot be considered an implicit request for the transmission time information as well. The fact that EMMs are requested in Bons would not teach or suggest to the skilled person that timing information for the very different EPG messages in Shimakawa could be requested.

2.   Claims 36, 37 and 43

Even further, neither Shimakawa nor Bons, taken individually or in any proper combination, teaches or suggests control messages being associated with "information defining transmission parameters for the control messages to be transmitted in the future, the transmission parameters including information on the bearer, the network or the operator providing the control message that are to be transmitted in the future," as per dependent Claims 36, 37 and 43. The Examiner argues that the features of the claims are obvious from Bons since Bons discloses a field (EMM_XID) in the EMM that will enable the terminal to identify the logical channel on which the EMM is transmitted. According to Bons, a logical channel is a sub-part of a stream identified by a PID in the broadcast signal and consequently it is not the same as information on the bearers, the network or the operator providing the control messages that are to be transmitted in the future.

B.   Claims 18-20 and 39-41 are Patentable

Pending Claims 18-20 and 39-41 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of Suzuki. As explained above, independent Claims 16, 24, 26, 27 and 31, and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa and Bons, taken individually or in any proper combination. Appellant respectfully submits that Suzuki does not cure the deficiencies of Shimakawa and Bons. That is, even considering Suzuki, none of Shimakawa, Bons or Suzuki, taken individually or in any proper combination, teach or suggest the claimed invention of independent Claims 16, 24, 26, 27 and 31. Appellant therefore respectfully submits that independent Claims 16, 24, 26, 27 and 31, and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa, Bons and Suzuki, taken individually or in any proper combination.

C.   Claims 21 and 22 are Patentable

Pending Claims 21 and 22 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of Alve. Appellant notes that Alve published on May 12, 2005, 2006, after the effective filing date of the present application (i.e., March 10, 2004). Pursuant to 35 U.S.C. §103(c), for applications filed after November 29, 1999, such as the present application, references that qualify as prior art under 35 U.S.C. §102(e), (f) or (g) cannot properly be cited to support an obviousness rejection if the subject matter of the reference and the pending application were commonly owned at the time of the invention. In the instant case, the subject matter of Alve was commonly owned at the time of the invention of the subject matter of the present application. In this regard, the present application and Alve are assigned to Nokia Corporation as evidenced by (a) the assignment for the present application recorded on June 13, 2007, at Reel 019424, Frame 0847, and (b) the assignment for Alve recorded on January 7, 2005, at Reel 016129, Frame 0848. As such, Alve cannot properly be cited in support of an obviousness rejection of the claimed invention under 35 U.S.C. § 103.

D.   Claims 23 and 42 are Patentable

Pending Claims 23 and 42 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of Connelly. As explained above, independent Claims 16, 24, 26, 27 and 31, and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa and Bons, taken individually or in any proper combination. Appellant respectfully submits that Connelly does not cure the deficiencies of Shimakawa and Bons. That is, even considering Connelly, none of Shimakawa, Bons or Connelly, taken individually or in any proper combination, teach or suggest the claimed invention of independent Claims 16, 24, 26, 27 and 31. Appellant therefore respectfully submits that independent Claims 16, 24, 26, 27 and 31 and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa, Bons and Connelly, taken individually or in any proper combination.

E.   Claims 29, 30, 45 and 46 are Patentable

Pending Claims 29, 30, 45 and 46 stand rejected as being unpatentable over Shimakawa in view of Bons, and further in view of Salo. As explained above, independent Claims 16, 24, 26, 27 and 31, and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa and Bons, taken individually or in any proper combination. Appellant respectfully submits that Salo does not cure the deficiencies of Shimakawa and Bons. That is, even considering Salo, none of Shimakawa, Bons or Salo, taken individually or in any proper combination, teach or suggest the claimed invention of independent Claims 16, 24, 26, 27 and 31. Appellant therefore respectfully submits that independent Claims 16, 24, 26, 27 and 31, and by dependency Claims 17-23, 25, 28-30 and 36-46, are patentably distinct from Shimakawa, Bons and Salo, taken individually or in any proper combination.

8.   *Claims Appendix.*

The claims subject to this appeal are as follows:

1.   (Withdrawn) A conditional access system comprising a transmitter for transmitting a plurality of control messages relating to a broadcast stream to a receiver, each of said control messages being associated with information relating to a transmission time for control messages that are to be transmitted in the future.

2.   (Withdrawn) A conditional access system according to claim 1, wherein said control messages include the future transmission time information.

3.   (Withdrawn) A conditional access system according to claim 1, wherein the transmission time information comprises information relating to the transmission time of the next control message to be transmitted.

4.   (Withdrawn) A conditional access system according to claim 1, wherein the transmission time information comprises a schedule of transmission time information for future control messages.

5.   (Withdrawn) A conditional access system according to claim 1, wherein the transmission time information comprises information defining the transmission time of the next control message that contains content different from content previously transmitted.

6.   (Withdrawn) A conditional access system according to claim 1, wherein said control messages are intended for a specified address and the future transmission time information comprises information as to when future messages are to be sent to the specified address.

7.   (Withdrawn) A conditional access system according to claim 6, wherein the specified address comprises an address of a smart card, a predetermined group of smart cards or all smart cards.

8.   (Withdrawn) A conditional access system according to claim 1, wherein the control messages comprise entitlement management messages.

9.   (Withdrawn) A conditional access system according to claim 1, wherein the control messages comprise entitlement control messages.

10.   (Withdrawn) A conditional access system according to claim 1, wherein the transmitter is also configured to transmit the broadcast stream.

11.   (Withdrawn) A conditional access system according to claim 1, wherein the transmitter for transmitting the control messages comprises a first transmitter and the system further comprises a second transmitter for transmitting the broadcast stream.

12.   (Withdrawn) A conditional access system according to claim 11, wherein the control messages sent from the first transmitter comprise entitlement management messages.

13.   (Withdrawn) A conditional access system according to claim 12, wherein the broadcast stream includes entitlement control messages.

14.   (Cancelled)

15.   (Cancelled)

16.   (Previously Presented) An apparatus comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following:

receiving a plurality of control messages relating to broadcast content and comprising information for determining whether a user has necessary subscriptions in place to view the broadcast content or information required to decrypt the broadcast content, each of said control messages being associated with time information relating to a transmission time for control messages which are to be transmitted to a receiver in the future; and

selectively activating the receiver to receive the future control messages at the transmission time.

17.   (Previously Presented) An apparatus according to claim 16, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

extracting said transmission time information from said control messages.

18.   (Previously Presented) An apparatus according to claim 16, wherein selectively activating the receiver comprises setting a power-up time for the receiver based on said transmission time information.

19.   (Previously Presented) An apparatus according to claim 18, wherein setting a power-up time comprises setting up a power up time to take account of delays in powering up the receiver.

20.   (Previously Presented) An apparatus according to claim 18, wherein selectively activating the receiver further comprises monitoring the power-up time and turning on the receiver when the power-up time is reached.

21.   (Previously Presented) An apparatus according to claim 16, comprising a mobile apparatus.

22.   (Previously Presented) An apparatus according to claim 21, wherein the mobile apparatus is configured in accordance with the Digital Video Broadcasting DVB-H specification.

23.   (Previously Presented) An apparatus according to claim 16, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following:

requesting the transmission time information independently of the control messages.

24.   (Previously Presented) A method comprising:

receiving a plurality of control messages comprising information for determining whether a user has necessary subscriptions in place to view a broadcast or information required to decrypt the broadcast and including transmission time information relating to a transmission time of future control messages; and

selectively activating a receiver to receive the future control messages at the transmission time.

25.   (Original) A method according to claim 24, further comprising incorporating said time information into each of the control messages.

26.   (Previously Presented) An apparatus comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following:

preparing a plurality of control messages comprising information for determining whether a user has necessary subscriptions in place to view a broadcast or information required to decrypt the broadcast, each of the messages including information relating to a predetermined transmission time for future control messages; and

directing transmission of the control messages to a receiver for receiving the control messages, the control messages being transmitted to the receiver for a selective activation module to selectively activate the receiver to receive the future control message at the predetermined time.

27. (Previously Presented) An apparatus comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following:

causing transmission time information to be requested for conditional access messages to be transmitted in the future;

receiving the transmission time information; and

selectively turning on a receiver to receive the messages at a time that substantially coincides with the future conditional access message transmission time.

28. (Previously Presented) An apparatus according to claim 27, wherein the conditional access messages comprise entitlement management messages.

29. (Previously Presented) An apparatus according to claim 27, wherein the transmission time information received in a messaging service format.

30. (Previously Presented) An apparatus according to claim 29, wherein the messaging service format comprises SMS or MMS.

31. (Previously Presented) A method comprising:

causing transmission time information to be requested for conditional access messages to be transmitted in the future;

receiving the transmission time information; and

selectively turning on a receiver to receive the messages at a time that substantially coincides with the future conditional access message transmission time.

32.   (Withdrawn) A subscription authorisation system for use in a conditional access system to provide a plurality of control messages to a receiver, the control messages relating to a service provided to the receiver by a service provider, each of said control messages being associated with information relating to a transmission time for control messages that are to be transmitted in the future.

33.   (Withdrawn) A subscription authorisation system according to claim 32, in which the control messages are provided by the service provider.

34.   (Cancelled)

35.   (Cancelled)

36.   (Previously Presented) An apparatus according to claim 16, wherein each of said control messages is further associated with information defining transmission parameters for the control messages to be transmitted in the future, the transmission parameters including information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future.

37.   (Previously Presented) A method according to claim 24, wherein the plurality of control messages further include information defining transmission parameters for the control messages to be transmitted in the future, the transmission parameters including information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future.

38.   (Previously Presented) A method according to claim 24, further comprising extracting said transmission time information from said control messages.

39. (Previously Presented) A method according to claim 24, wherein selectively activating the receiver comprises setting a power-up time for the receiver based on said transmission time information.

40. (Previously Presented) A method according to claim 39, wherein setting a power-up time comprises setting up a power up time to take account of delays in powering up the receiver.

41. (Previously Presented) A method according to claim 39, wherein selectively activating the receiver further comprises monitoring the power-up time and turning on the receiver when the power-up time is reached.

42. (Previously Presented) A method according to claim 24, further comprising requesting the transmission time information independently of the control messages.

43. (Previously Presented) An apparatus according to claim 26, wherein each of said control messages further includes information defining transmission parameters for the control messages to be transmitted in the future, the transmission parameters including information on the bearer, the network or the operator providing the control messages that are to be transmitted in the future.

44. (Previously Presented) A method according to claim 31, wherein the conditional access messages comprise entitlement management messages.

45. (Previously Presented) A method according to claim 31, wherein the transmission time information received in a messaging service format.

46. (Previously Presented) A method according to claim 45, wherein the messaging service format comprises SMS or MMS.

9.   *Evidence Appendix.*

None.

10. ***Related Proceedings Appendix.***

None.

CONCLUSION

For at least the foregoing reasons, Appellant respectfully requests that the rejections be reversed.

Respectfully submitted,

Andrew T. Spence
Registration No. 45,699

CUSTOMER NO. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111
LEGAL02/32213845v1

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON DECEMBER 2, 2010.